L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
AN ***1958:50929*** CAPLUS
DN 52:50929
OREF 52:9227i,9228a-c
TI Lactoflavine and 2',3',4'-triacetyllactoflavine
IN Sato, Tetsuo; Sato, Kazuyoshi
PA Tokyo Institute of Technology
DT Patent
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 32003277		19570601	JP	

AB Electrolytic reduction of D-ribonolactone in Na2SO4 as an electrolyte and H3BO4 as a buffer, concn. of the electrolyte, adding alc. and removing Na2SO4 gave 200 ml. sirup (I) contg. 30 g. D-ribose and 10 g. H3BO3. I treated with 35 g. 4,5,2-Me2(O2N)C6H2NH2, stirred 2 hrs. at room temp., and kept overnight at 0.degree. gave 50 g. 2-nitro-1-(D-ribosidamino)-4,5-dimethylbenzene-H3BO3 complex (II), m. 195-7.degree.. Catalytically reducing of 50 g. II and 36 g. alloxan in 400 ml. EtOH with 8 g. Raney Ni, concn. of the product, adding 180 ml. 18% HCl, adding H2O2 dropwise and dilg. the soln. with H2O gave 40 g. vitamin B2, m. 280-1.degree. (decompn.). D-Ribose (15 g.) and 6 g. H3BO3 in 20 ml. alc. treated with 18 g. 4,5,2-Me2(O2N)C6H2NH2 in 50 ml. alc., kept 2 hrs. at room temp. and overnight at 0.degree. gave 25 g. II, m. 195-7.degree.. Catalytic reduction of 25 g. II and 18 g. alloxan in 150 ml. alc. with 5 g. Raney Ni at high pressure and treatment of the product as above gave 22 g. vitamin B2, m. 280-1.degree.. II (50 g.), 150 ml. Ac2O and 20 g. AcONa refluxed 2 hrs., the Ac2O removed in vacuo, the residue in ice H2O extd. with CHCl3, the CHCl3 removed, the residue with 20 g. alloxan in 300 ml. MeOH reduced with 10 g. Raney Ni and H and the product treated as above gave 42 g. 2',3',4'-triacetyllactoflavine, m. 202-3.degree. (decompn.).

IT Boric acid, esters (cyclic) with N-(6-nitro-3,4-xylyl)-D-ribosylamine
Ribosylamine, N-(6-nitro-3,4-xylyl)-, D-, cyclic 2,3-borate
IT ***83-88-5*** , Riboflavine ***116081-53-9*** , Riboflavine, 2',3',4'-triacetate
(prepn. of)
IT ***1942-28-5*** , 1,3,2-Dioxaborolane
(sugar derivs.)
IT ***83-88-5*** , Riboflavine ***116081-53-9*** , Riboflavine, 2',3',4'-triacetate
(prepn. of)
RN 83-88-5 CAPLUS
CN Riboflavin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

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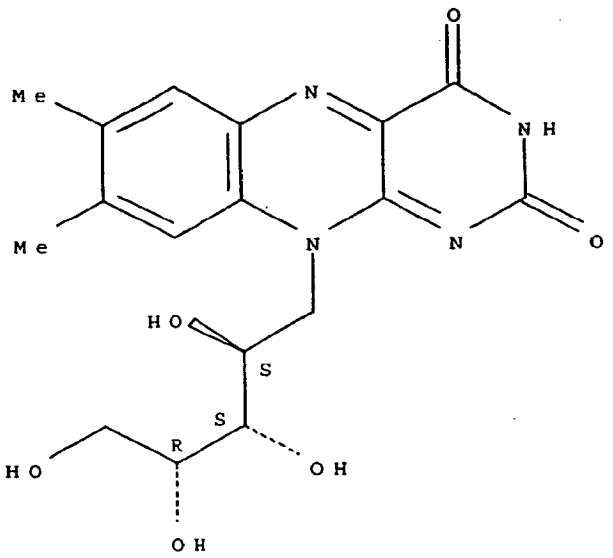
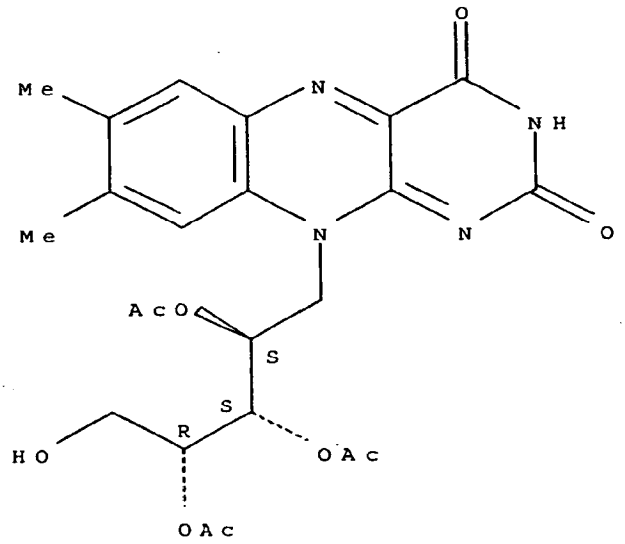


RN 116081-53-9 CAPLUS
CN Riboflavin, 2',3',4'-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT ***1942-28-5*** , 1,3,2-Dioxaborolane
(sugar derivs.)
RN 1942-28-5 CAPLUS
CN 1,3,2-Dioxaborolane (7CI, 8CI, 9CI) (CA INDEX NAME)